

The EIFFEL-GEAR Plierench KIT

Say: Eye-Tel-GEARED

NEW PERFECTED MODELS (TRADE MARK)



Here... an Irresistible, 1000-Pound Pressure-Grip, with an Easy Hand-Grip on the Form-Fit, "Non-Skid" Handles

Try Its
One-Ton
POWER-GEAR

VOW - 7" and 8" KITS... MASTER-KITS and GIANT-KITS!

Get Your EIFFEL-LINE SUPER-TOOLS From—

E.V. CROCKER,
P.O. BOX-240, DES MOINES, IOWA

The First NEED and Last Resort
for EVERY KIND of Tool Work
around Home, Car, Shop, Farm,
Office, etc. — EVERYWHERE!

E-G Manual of Mechanics—M-7

• 101 Illustrations • Copyright 1947, by JOS. EIFFEL, Chicago •

IMPORTANT — Every Plierench Purchase should Receive and Keep...

this **MANUAL OF MECHANICS - M - 7**... All-Important DIRECTIONS for Operating, and the **GUARANTEE**, and Pictures of Numerous Uses not shown elsewhere.

When **PAGES 3 and 4 of CIRCULAR - C -** are included in the **MANUAL - M - 7**... Keep together.

● The **NEW CATALOG - CIRCULAR - C -** has 4 Pages, each 8 1/2" x 14":

Page 1... shows the Complete **EIFFEL - LINE SUPER - TOOLS** in 20 Illustrations... gives short Descriptions and Specifications for Ordering, and indicates Numerous Uses;

Page 2... is the Same as Page 2 of this **MANUAL OF MECHANICS - M - 7**;

Page 3... Pictures and Describes the **MASTER KIT**, the **GIANT-KIT** and the **ACCESSORIES**, has Directions for Use, and Pictures and suggests countless applications;

Page 4... is the **EIFFEL-PICKALL Circular**. It has a Large picture of the **Pickall**, gives Descriptions and Specifications, and pictures and suggests 101 Applications.

● For Handy Reference spread the circulars open, and turn pages from Bottom Upward.

Thousands of KITS Have Saved Their Cost in One Day's Use!

Now, the "VEST Pocket Machine Shop" the 3/4 - Million World-Famous "POCKET Machine Shops"

The Mightiest Hand Tools of All Times... **The EIFEL-GEARED PLIER**

A Parallel PLIERS, Ratchet WRENCH, Speed VISE

The 8 1/2" PlieRench has a 10-to-1 POWER-GEAR TRANSMISSION (the 7", 8-to-1), which Boosts the average 100-Pound Hand-grip to a 1000 (1 1/2-TON) Direct-Pressure-Grip between the Jaws—2 Hands will make it!

The UNIVERSAL PlieRench, No. UP-1... Pictured Actual-Size has the Universal GEAR-Jaw, No. UGJ-1, with 4-WAY V-GROOVES, and PARALLEL and CORNER-V-Grips that Hold ALL Shapes with a "Welded"



Choose
This New
7-Inch...

... Tool Marvel of
Power-Performance, with
Handy "Pocketability."

• Imagine the Value of a pair of Steel Fingers as Versatile as your own, that apply up to 1/4-TON of Direct-Pressure!

• It's a One-Hand tool, carryable in a Vest Pen-pocket; yet Matches the 8 1/2" Size on All but the Larger and Heavier work, and it works in very close quarters.
• Study this 7" KIT here, and the 8 1/2" KIT at the Right, then order the one you need most, or, better still, get Both sizes, to have the Best tool for Every job.

• Surprisingly Many Women are Buying this 7" KIT... Seeing that it's the ONLY tool that Fits their hands and gives them Power and Skill for Amazing results; and seeing it's a Bargain too!

• In a Test it applied More pressure at the Jaw-Tips, with a One-hand grip, than a 20", 3 1/2-Lb. Blacksmith's Tongs.

• Twisting Heads Off 1/2" Stove Bolts with the 8 1/2" PlieRench has amazed tool users 'round the World, but now—It's Done with the 7" PlieRench! It is as Remarkable for the Heavy work it does, as the 8 1/2" is for the Fine work it will do.

New
SIZE

7"x1 1/2"x1 1/2"

(Cut Actual Size)

Wght. 9 Ozs.
of KIT 12 Ozs.

Gear-Ratio
8-to-1

Grip up to
1 1/2-TON
Pressure

PATS.
1181654
1862817

Screwdriver
and Pry

Slender, 1 1/2"
Long Jaws
Work in Tight-
est Places.



Washer in
V-Grooves
for Reaming,
Filing, etc.

Saws with "welded"
V-grip on blades of
Any Width, 1/16"
to 1 1/2".



A Perfect Ratchet Wrench
with Automatic Grip-LOCK-
and-Release that works at all
angles, and on All Shapes.



The PIPE PlieRench No. PP-2, is Instantly made by Jaw, No. PGJ-2. It Turns Pipe set Tight to a Wall, and Studs, and Any Irregular shapes, In or Out in Tightest places.



It Turns "Bed"
Nuts in Tight
Places... that
Other tools
can't budge.



Safely Holds, Turns,
Soft and Thin-walled
Tubing, Gripping and
Turning pressures are
Separately controlled.



The WIRE PlieRench, No. WP-3, is Instantly made by Gear-Jaw, No. WGJ-3. Its "Convex-Line-Grip" Universal Frame jaw, is the Most powerful Holding

Makes Springs...
Any Diameter, of
light and Heavy
Spring Wire... of
Any Length.



An "Inside
Welded
Grip" for
Washers,
Pipes, etc.



The EIFEL-GEARED

TRADE-MARK
Say... Eye-fel-GEARED (It's the Improved Eifel-GEARED)

This WONDER KIT Consists of a UNIVERSAL or the 8 1/2" Size), with the PIPE Gear-Jaw No. PGJ-2, and All other accessories.



• Either of these PlieRench Kits is the Best of Best Other Tools... EASIER, and a Hundred times

It BEATS
These
In MANY
Ways—



(Lbs.) 1 2 3 4 5
42.50 2.00 2.50 1.50 1.25

2
↓

—The PlieRench OUT-Grips
Tools, thru Combined

• Therefore, WHY—Buy and Own a BETTER Tool Service

• Coin-Pressed Steel Forgings, Trip

Actual
Size

MOST IMPORTANT — Don't Use a Plierenc DIRECTIONS, to ADJUST and OPERATE

To ADJUST to a Million Sizes — 0" to 1 3/4"; Or to CHANGE Gear Jaws

● In a Half-Second you "DROP the GEAR-Jaw OPEN," with this One-Hand Gear-Jaw Release.

● Do this RIGHTLY, Just as Pictured—Simply grasp the GEAR-Handle with ALL Fingers (get NO finger Around the other handle), then, while Firmly holding the GEAR-Handle, "PRESS THE FRAME AWAY" with the Thumb-tip. This overcomes the Engagement Spring tension, and Releases the GEAR-Jaw to Freely "DROP OPEN".

● While KEEPING the GEAR-Jaw thus Released—you can Slide it FREELY to Any opening, either by tipping the Plierenc from side to side, as pictured, or by pressing it against something.



FREED the Gear-Handle lets the Engagement Spring Automatically Mesh the Gear and Hold the Engagement. (The Spring is of Music Wire and as Durable as the Plierenc.)



● NOTE—When the GEAR-Jaw is Released RIGHTLY, for changing the Jaw-Opening... meaning with the Handles NOT Too Far Apart... the longer End Stop Tooth prevents the Jaw from falling out.



ONE-Hand GEAR-Jaw SHIFT

Another way to Adjust-and-Grip with ONE hand is to "Drop the Gear-Jaw Open" (if necessary), then Press (Ratchet) the Jaws together as pictured, having the little Finger between the handles to provide a "working spread."



A Split-Second GEAR-Handle "RATCHET-Shift" and "RELEASE-Shift"

● In Some positions it is handier to "Ratchet-Shift, or to "Release-Shift" the Gear-HANDLE, as here shown... instead of the Gear-JAW —

● If the Handles are Too CLOSE TOGETHER... when the Jaws Fit the work... a light Finger-Lift will Ratchet the GEAR-Handle OUTwardly to handy "Working-Spread."

Or; if the Handles are Too FAR APART, simply Pull Out... Disengage... the GEAR-Handle, and Re-engage at "Working-Spread."

● The Jaws Grip ALL Sizes of Work, while the Handles Fit ANY Size of Hand —



● Above is shown how the GEAR-Handle (the Pivoted Handle) may be at Any of 2 or 3 "spreads" with the GEAR-JAW at Any of several Openings. Movement of the Gear-Handle moves the Gear-Jaw about 3/8" in any of the 1/4" Tooth Engagements, giving handy Overlapping "working-spreads."

In a Half-Second you Press the GEAR-Jaw In — with this RATCHET GEAR-JAW SHIFT —

● When Both Hands are available, the QUICK Way to Adjust-and-Grip is — DROP THE GEAR-JAW WIDE OPEN... as shown at Left Above... then, with the Jaws Spanning the work, and Handles held LOOSELY at "Working-Spread", PRESS the Jaws together—they will RATCHET to a Fit... for the handles to apply the Pressure Grip.



To CHANGE GEAR-Jaws in One Second

● Release the Gear as shown above; EXCEPT, hold the Gear Handle with only 3 Fingers, and Press the Thumb and Forefinger against the Frame at the SIDES of the Gear-Handle. This spreads the handles to let the longer STOP-Tooth pass.



● Hold the Gear-Release with wide-spread handles, while removing or inserting Jaws.



IMPORTANT... BE FAIR with Yourself and this Wonder Tool Servant. Learn to Use it RIGHTLY, per these Directions, and You'll find it to be Incomparably the MOST... Simple, Handy, Speedy and Powerful All-Purpose tool in the World.

Until You Have Practiced per these Simple it in the EASY and INSTANT..RIGHT WAY

To Use the Perfect Automatic LOCK-Grip and Ratchet Wrench Action:

FIRST, Learn from preceding pages, how to make the Jaw-and-Handle Adjustments; and then snap a Jaw-Grip on to the "Flats" or Corners of the nut, with the Handles at "Working-Spread."

At Right is shown a way of pressing the Jaws to the part with Thumb & Forefinger, while adjusting the GEAR-Handle with the other hand.



1, 2) Adjust a Jaw-Grip, and ALWAYS have BOTH Handles in Hand as in Figure 4, and KEEP the Jaws spanning the nut.

3) ALWAYS put the TURNING Push or Pull on the GEAR-Handle, which Automatically Boosts and LOCKS the Pressure Jaw-Grip.



4) After TURNING, allow the Handles to Spread, as you Pull back lightly on the FRAME-Handle Only, which Automatically Opens the Jaws to come 'round for a New grip.

5) Close on Both handles, and the Jaws will take a "welded" V-Groove grip on the CORNERS of the nut... Giving 12 grips to 1 Turn, and needing only a 30° Space!

● It's All Done in 5 Seconds—Simply Grip-and-Turn, then EASE and RETURN, and.. Repeat.

● It Gives you the Only PERFECT, UNIVERSAL RATCHET WRENCH Action, that Works in ALL POSITIONS, and On ALL SHAPES, in ALL SIZES.. 1/16" to 1 1/2".

"END-ON-NOSE-SPIN" Action—

The Slender End-on "NOSE-Grip" of PlierRench Jaws will grip and Turn a 3/4" wide nut in a 1 1/4" hole, and a Wide Handle-Spread provides POWERFUL, Turning Leverage.

● Also use this End-on Speed wrench action to "Spin" nuts On and Off while Not Too Tight.



● You're Doing it ALL WRONG.. if a PlierRench SEEMS Slow or Unhandy in Any way.

A TURNING
Push or Pull on the
GEAR-Handle
Automatically
LOCKS the Jaw-
Grip, and a slight Reverse push or pull
Automatically Releases the grip... pro-
ducing a Perfect, Automatic, RATCHET
Wrench Action.



● Here is shown an Actual Test in which a PlierRench with the FRAME-Handle sawed off, carries a 200-Pound Pull. This Pull at the End of the GEAR-Handle is Boosted... by the 10-to-1 Power-Gear... to a 2,000-Pound (1-Ton) Direct-Pressure grip on the pipe support.

The Automatic TURNING-GRIP-LOCK—is ADDITIONAL to the 1/2-to-1-TON DIRECT-Pressure PlierRench Grip.

The Grip-LOCK Acts ONLY when a Jaw-grip is CLOSED on the work and the TURNING Force Applied on the GEAR-Handle... NOT on the FRAME-Handle.

● It is Positive on Flat and Cornered shapes of 3/8" and larger. When Turning smaller shapes and Round shapes, the Grip-LOCK IS Effective, but a little More pressure on Both handles is needed.



"HALF," or "PINCH" Grips TURN



Because the 1/2-to-1-TON Pressure Grip reaches to the very Jaw-Tip... a Half-grip, or a little slanting "Pinch-Grip" will Hold and TURN a Tight, Worn Nut in a Tight Place.

The Longer (1 1/4"), more tapering and slender Jaws reach in and work in surprisingly close places.

It Turns Chewed Nuts in Tight Places that No Other Tools can handle.

"NOSE-Grips" HOLD and TURN..

... Diagonally, at ANY Angle, and Work Under and Over obstructions, and Inside casings, drums, etc... often where No Other Tools Can.



When TURNING ANYTHING... ALWAYS put the Push or Pull on the GEAR-Handle to benefit by the LOCKING Action.



4-Way V-GROOVES Give RIGID Grips for Every Shape



The 4-Way V-Grooves, in the PlieRench Frame Jaw and in the UNIVERSAL-GEAR-Jaw, pictured here, Enormously increase the Effectiveness of the Pressure-Grip; and... for the FIRST Time provide an absolutely RIGID, Non-Marring, Non-Slip Grip for work of Every Possible Shape in Every Position.

● These 4-Way V-Grooves Multiply the Per-Square-Inch Pressure by reducing the Contact Areas; and the Corners and Edges formed, HOLD the work against movement in Any direction.

● The Section above shows how the Jaw faces are Parallel at the "nose," but taper away slightly towards the back. This compensates for wear, so that Flat work is Always held by the 4 "nose" facets having an area of only 1/20 square inch.

● When the 1,000-Pound PlieRench Direct-pressure grip is applied on that area, a Per-Sq.-in. pressure of 256,000 Pounds... 128 Tons... results. That is why PlieRench grips can compress small areas of steel



Here is Pictured how the Jaw Facets can be forced into Lead with a hand-grip. A PlieRench Grip holds soft materials FIRMLY and RIGIDLY without marring them because the Pressures are in perfect control.

The V-Grooves Make CORNER-Grips



Note how the Double-Angle Side V-Grooves Bridge the corners of Octagon, Hexagon, or any cornered shapes. Corner Grips hold as if WELDED on, yet, even on Nickel-plated Brass leave only two almost invisible hair-lines 1/16" to either side of the corner edge of the work.



● Another Great value of the V-Groove Corner-Grips is that they give you 12 Grips to One TURN of a 6-Cornered nut, needing only 30° space and Turning in Tightest places, and GRIP and TURN Any Shape at Any Angle and in Any Position!



The "NOSE" V-Grips PlieRench "Nose" V-Grips are incomparably More Effective for Holding, Twisting or Turning all shapes "End-on," than Clamps, Pin Vises, or any other tools... it's great for "Spinning" nuts on or off while not too tight.



(Vise-grip on Frame-handle does Not affect PlieRench Grip)

A WORLD-FAMOUS Grip Test

Put the HARDEST-TO-HOLD THING KNOWN... a Large, Polished, Hardest Steel Bearing Ball... between PlieRench Jaws and put a Light Rubber Band tightly 'round the handles, and... it will take a 300-Pound Pull to budge it. Now put on a good Hand-Grip, and it will take a 1000-Pound Pull to pull it out!



● Next—Put the Ball between Jaws of Any "SCISSOR-ACTION Pliers" and note the Wide Handle-Spread. Then—Press the Handles, and... the Ball WILL JUMP RIGHT OUT... in spite of the sharp teeth!



● PlieRench Grips HOLD IN... "Scissor-grips" Push OUT.



Other AMAZING Grip Tests

With the Frame-Handle held in a Vise as above, a Hand-Grip will hold smooth, flat steel against a 1000 to 2000-Pound Pull... a 10-to-1 Grip.

● Similarly a Hand-grip can hold a Nut gripped on its Corners against a 10,000-Pound Pull... a 100-to-1 Grip!



A UNIVERSAL Handle and Frame

The "Nose" V-Grip holds Any Saw Blades, from 1/16" to 1 1/2" width, as if Welded to the Jaws; also holds Files, Taps or any other cornered shapes.



● You can get Much efficient service from Broken Saw Blades, and can saw in places where a Hack-saw Frame won't work. Cutting on the Pulling stroke will reduce breakage of blades.

● The PlieRench is a More Speedy and Powerful UNIVERSAL CLAMP, and a Rubber Band, or a



Spring about 5/16" diameter, will maintain a RIGID Grip on work of any shape, rest your hand, and give perfect control.

● Such Astounding Gripping PERFORMANCE results from the COMBINED Effects of the PARALLEL Jaws with 4-WAY V-Grooves, the 10-to-1 POWER-GEAR Transmission, plus the AUTOMATIC Grip-LOCK-and-Release Action

A Wire, Spring, Chain and Cable Tool that Works After Other Tools Quit

The "CONVEX-LINE-Against-V-GROOVE Grip" of the 8 1/2" WIRE PlieRench, provides "Welded" grips for the "Impossible jobs," and bends Steel Rod up to 3/8" at the Side-V-Grooves and 1/4" at the Jaw-Tips... the 7" WIRE PlieRench up to 3/16" at the Side-V-Grooves and 1/8" at the Tip.

● To Bend HEAVY Wire Easily, use these Hand Positions, viewed as when you Look Down on your hands and the bench.

● Keep Wrists Stiff... Push Down With Shoulders.



1) Grip near End of wire with the hands in This position and bend as far as possible.



2) Hold Same wire grip... shift hands to This position and bend farther.



3) Hold same wire grip... shift hands back to 1st position and close the eye.



4) Shift flat jaw to back of eye... hands to 2nd position... put in "kink."



● You can Repair TIRE and other CHAINS... and Make many kinds... with the PlieRench.

● A PlieRench and a chisel did a lot of "510-Sleeve-puller" jobs, it often Gets 'em where Nothing else will.



You Can Make SPRINGS a Yard Long...



... By guiding the wire in at the Back, as you roll the coils, And... of Large diameters by feeding the coils onto a pipe and following the pipe edge for the curve.



Above Is Actual Size



Use this "Side Friction Grip" for making Smallest Rings to large Flat Coils, of Finest to medium wire.

The Universal PlieRench Makes Springs...

... From 1/16" to 3/16" Dia., of music wire 1/100" to 1/32" Dia., as follows: Bend a "Mandrel" as pictured in Fig. 1, of wire of inside diameter of spring wanted, keeping the "eye" small and bends round. Pass an inch end of wire thru eye and, Fig. 2, guide the first couple of coils with the thumb and forefinger as you turn the "crank." Place, Fig. 3, the Mandrel in the Side V-Grooves; and, Fig. 4, let the wire feed in at the Nose V-Grooves... makes springs any length.



● To make Springs of 1/4" to 1 1/2" Dia., start a few coils on one end of a core wire and clamp that end and the first coils in a Vise. Then wind the coils 'round the core wire, as indicated below for winding strands 'round a Cable Splice.



A PlieRench Knows NO "Hard Jobs"



2 PlieRenches give more holding and turning power than a 24" Wrench!

One PlieRench will OUT-grip large vises in many useful ways, and 2 ALONE will do Better on many Heavy jobs, than Any Other combination of tools... with or without a Bench Vise.



No. 1, 3/8" x 3/4", No. 4, 1/2" x 3/4", No. 6, 3/4" x 1/2", No. 7, 1/2" x 1/2" Were Twisted with ONE PlieRench on Top end.

... No. 2 and 5, 1/4" x 1/2" and No. 3, 1/2" x 1/2" were Twisted with 2 PlieRenches as pictured... ALL Shapes are Steel, and the other end was held by this 40-Pound Vise.

● Never Before such Hand Power and Control!

A Universal "Chuck," Clamp and Handle



At Left is shown how things a Vise won't Hold tight. Can be held rigidly in a PlieRench, and it in a Vise.



The PlieRench is a Speedy "Chuck," Clamp and Handle for All Shapes... for Filing, Drilling, Grinding, Polishing, etc. (See also Page 6).

● The PlieRench holds the odd and "impossible" shapes... Washers, Hard steel balls, shafting, etc... with that same rigid "welded" grip.



EXTRA PIPE PlieRench Advantage



The PIPE PlieRench is a Super Pipe Tool. It Turns Pipe Set Tight to a wall, and turns Irregular Round shapes with a smooth Lock-and-Relatch action.

● It will Turn Faucet Bushings, etc., in or out with a powerful grip on the Edge of one end, and Reducers with a positive grip on the little "ears"... most useful grips.

● The "Shoulder-Grip," at right, is an absolute grip for pulling and Prying off collars, washers, etc.

● 2 PlieRenches are great for assembling parts and fittings... They hold them Squarely and Rigidly in Perfect Control.

● A PIPE PlieRench Removed this wrecked lug nut, in a minute... after other tools wasted an hour.



It's a Great NUT-CRACKER too

